

# Executing in IPD A Full Team Plus/Delta

Matt Bleakley, Whiting-Turner Contracting Co.
John Clappison, CCK Construction Services, Inc.
Craig Russell, Walt Disney Imagineering
Ryan Seckinger, Walter P Moore

THE ABC'S OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

October 22<sup>nd</sup>, 2020

© LEAN CONSTRUCTION INSTITUTE

THE RELEGIES STATES

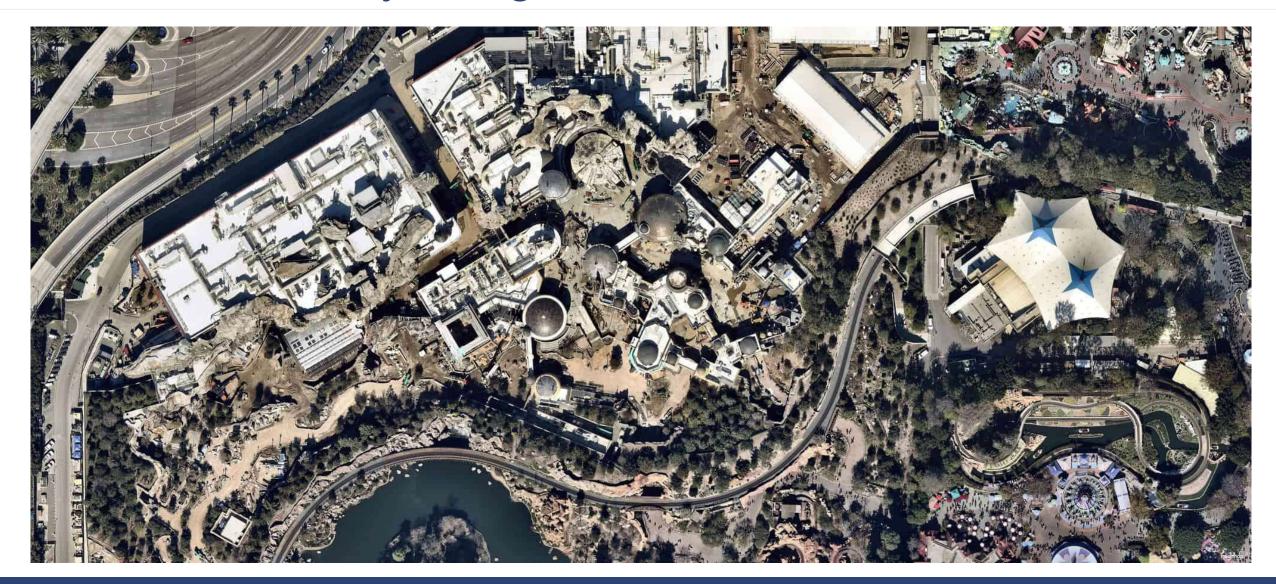
# Star Wars: Galaxy's Edge



# Star Wars: Galaxy's Edge



# Star Wars: Galaxy's Edge



### **Our Panel**

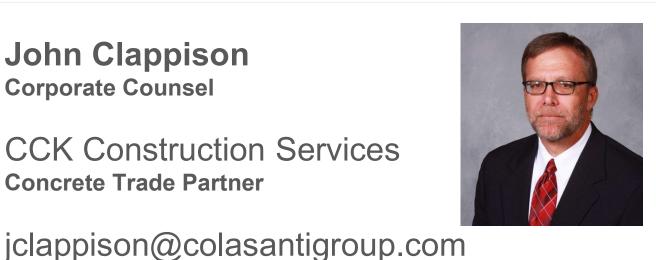
**Craig Russell Executive Director** 

Walt Disney Imagineering **Owner** 



John Clappison **Corporate Counsel** 

**CCK Construction Services Concrete Trade Partner** 



craig.s.russell@disney.com

Ryan Seckinger **Principal** 

Walter P. Moore **Structural Engineer** 



**Matt Bleakley Vice President** 

Whiting-Turner Contracting Co. CM/GC



matt.bleakley@whiting-turner.com

rseckinger@walterpmoore.com

### Big Ideas

- Creating a Culture of Safety Commitment by the FULL team to safety during execution lead to setting new standards for all the partners.
- **Speed** of delivery, reduction in overall schedule, trust enabling faster collaboration, project fully closed out in months, not years.
- Estimating & Cost Trending on a very large scale with many stakeholder groups, maintaining visibility to the team to incentivize good behaviors and decisions.
- Enabling Behaviors which create an environment where we care less about the conventional issues and more about delivering the project successfully together.

### Safety Culture

- The Team agreed the target should be below industry standards, WELL below.
- Established safety as a key metric and requirement for successful project.
- Committed resources and support from leadership.
- Team effort to change the usual behaviors and make real improvements.
- Safety was a top priority on our team charter.





### **STAR WARS:: GALAXY'S EDGE**

### IPD TEAM CHARTER





#### **MISSION STATEMENT :: ALL IN**

This Team is *ALL IN* working collaboratively to achieve the project's safety, quality, cost and schedule goals while delivering on the project's creative Vision.

We will employ strict project controls and communicate in an open and honest manner.

This team will be trusting, collaborative, transparent and innovative.

We will work to create a high performing team using lean principles and technology.

#### **ON BOARDING STRATEGY**

We will provide new team members with all of the necessary information for quick, but thorough onboarding. Our team member onboarding materials will include:

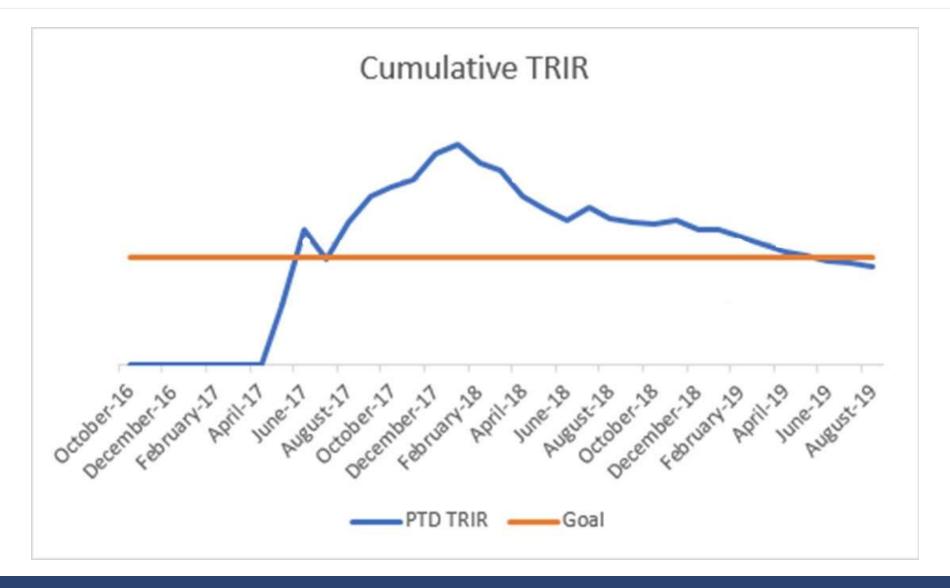
- Overview of creative intent and goals
- Team Charter document for review and concurrence
- IPD "101" Overview
- Site specific safety orientation
- BIM Execution Plan
- Tools & Processes



#### **METRICS**

	<del></del>								
VALUE	GOAL	MANIKA	HOW WE MEASURE?	TARGET	CHAMPION				
SAFETY	Create and implement a world class safety culture! It's a core value. Everyone will participate and be proactive!	SAFETY BEGINS WITH ME!	Lost Time (Days Away) - LT (DA) Days Away, Restricted Transfer - DART Total Recordable Incident Rates - TRIR Target Zero Participation		Safety Team				
GUEST EXPERIENCE	Work with our Creative, Ride and Show Partners to deliver an epic guest experience! Assist with driving down costs.	OUT OF THIS WORLD EXPERIENCE!	Contract Forecast Projections		Controls Team				
TEAM HEALTH	Build and maintain a highly functional, high performing team in which everyone is involved with the project. We will constantly share the awesome scope and impact of our work, and regularly celebrate our shared successes.	ONE TEAM, ONE DREAM! WORK HARD, PLAY HARD!	Team Health Survey Schools SMT # 4 Scores are baseline Onboarding		Continuous Improvement Team				
D1B2	Recognize and leverage the incredible potential that can be gained through the D1B2 effort. We commit to robust communication between the sites to leverage lessons learned.	D1B2 - LEARN FROM & SHARE WITH THE OPPOSITE COAST!	IRL's		QC & D1B2 Team				
CONTROLS	Drive team performance predictability and optimization through strict cost reporting, including rigorous earned value measurement, contract forecasting and aggressive change management. All items will be tracked via the dashboard with consistent and transparent reporting.	ACCURATE, CONSISTENT & TRANSPARENT!	EV Contract Forecast Contingency Reporting Change Management		PMT / Controls Team				
SCHEDULE	Use the last planner, pull planning and other intense collaborative planning tools to prepare and execute our work. Everyone, including Ride and Show vendors, will participate in this effort and send the right people to the meetings to make this approach effective. We will strategically deploy schedule acceleration premium funds and resources to achieve the project's handoffs and meet the required turnover to Operations.	ON TIME TOGETHER!	Planned Percent Complete (PPC) Key Schedule Milestones (KSM's) Schedule Mitigation Allowance		Planning Team				
PROFIT	It is our shared objective that the IFOA partners maximize the profit pool, including earning back the ICL adjustment offered during FTC negotiations.	MAXIMIZE THE TEAM'S INVESTMENT	Final Actual Cost (FAC)		PMT / Controls Team				

### Safety Trends



# Safety Culture – Tuesday Morning

Steel Erector

Disney Safety

Mechanical TP

Whiting-Turner

Electrical TP



Jobsite Colo-Office Front Door

Framing, Drywall & Plaster TP

CCK (Concrete)

# Lightspeed!!

- Speed of delivery, reduction in schedule, trust enabling faster execution.
- Utilize project model for coordination and shop drawings.
- Eliminate the need for formal shop drawings process in many disciplines.
- Reduction to number of steps from design review to execution
- Removal of organizational and commercial constraints to enable more efficient execution.



### Lightspeed – Skipping the Line

DATETITLECOLLABORATORSA3 NO.10.05.2016VILLAGE CONCRETE REBAR COORDINATION AND SHOP DRAWINGJOHN CARREL, CASEY OLSEN, RJ REED029

#### PROJECT DELOS :: VILLAGE (All Buildings)

Alternative #1

#### BACKGROUND

The LPD team is approaching the cut off for structural elements to be finalized and needs to develop a strategy for the detailing, coordination and shop drawing production for the structural rebar installation.

#### **CURRENT CONDITION**

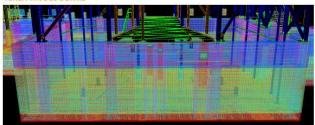
The team is currently evaluating three options for producing these deliverables:

- Trade Partner Detailing (2D)
- · 3D Rebar Detailing Firm
- Structural Engineer, Walter P Moore

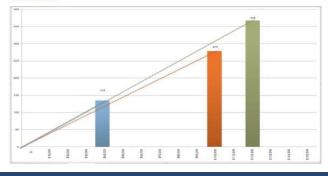
#### GOAL

To develop an optimized strategy that supports the need to begin rebar detailing for the Village facilities while weighing commercial terms versus the quality of the coordination effort and minimizing the risk for design changes.

#### EKLA MODEL DETAIL



#### CBA GRAPH



#### **Traditional Detailing 3D Trade Partner Detailing 3D WPM Detailing** Factor #1 - Level of Coordination Criteria: Ability to coordinate amongst stakeholders to deliver the design without construction risks. NO ABILITY FOR DESIGN PHASE DESIGN PHASE COORDINATION DESIGN PHASE COORDINATION ATTRIBUTE COORDINATION OR CLASH & 3D CLASH DETECTION & CLASH AVOIDANCE DETECTION **ADVANTAGE** LOWEST 25 MEDIUM 80 HIGHEST Factor #2 - Strategic Procurement Criteria: Ability to procure most competitive bids from the multiple sources. MINIMUM 3 BIDS PER MINIMUM 3 BIDS PER SOLE SOURCED VENDOR **ATTRIBUTE** COAST COAST ADVANTAGE 2 ADDITIONAL BIDS 50 2 ADDITIONAL BIDS Factor #3 - Impact to Schedule Criteria: Timeframe for preparing Submittals, Coordination and Review **ATTRIBUTE** 2 WEEKS ADVANTAGE 20 5 WEEKS OF SAVINGS 70 6 WEEKS OF SAVINGS 75 Factor #4 - Design Flexibility Criteria: Cost of designing for flexibility versus enhanced coordination (i.e. +2" of additional Concrete, etc.) ATTRIBUTE **ADVANTAGE** 99 100

Alternative #2

Alternative #3

TOTAL IMPORTANCE	135	279	PREFERRED DIRECTION	368	
					2

#### PROPOSED DIRECTION

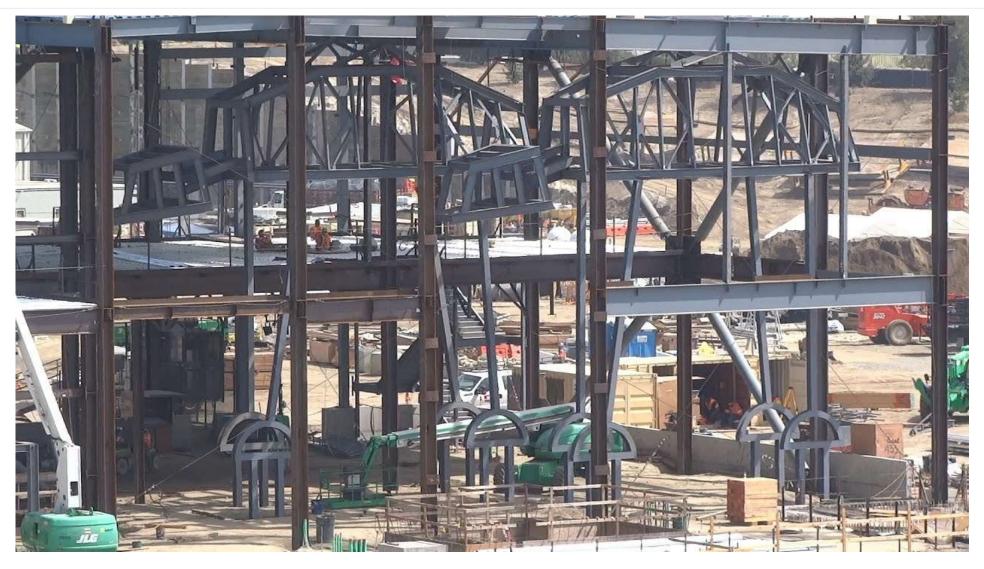
Having WPM 3D model the rebar for the concrete, coordinate the design and prepare the shop drawings is the most advantageous direction for the team to proceed for the Village for Delos 1 and 2 for following reasons:

- . WPM is the most qualified Team member to AVOID conflicts during Coordination
- · The team is able to procure the Rebar as a commodity within the marketplace to get BETTER pricing.
- GREATER schedule savings for Coordination and Review.
- Greater flexibility within the Design process, WPM can QUICKLY react to late changes.

Cost delta between different firms developing shop drawings (\$40 / ton included in CWE)



# Lightspeed!!



### **Estimating & Final Cost Trending**

- The risk sharing culture made us focus on getting the project to come in at budget instead of allowing the estimate to tell us where we really stand.
- Prognostication of the final outcome failed due to over-reliance on estimating.
- Strength of team culture contributed to internal bullying of each other to accept lower targets.
- The team is only truly incentivized to the right behaviors once everyone is under the FTC commitment.
- Progressive target cost approach to bite off portions of the project to get us into the field. Was
  good concept to get us across the FTC line, but we ended up with "Tranche Fatigue" and made too
  big of a jump at the end to set the final FTC.

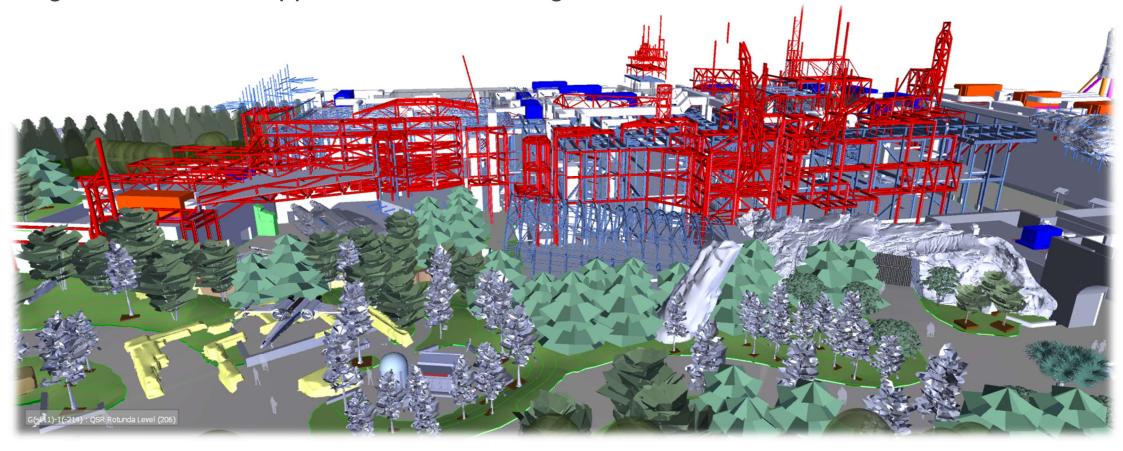
# **Estimating & Cost Forecasting**





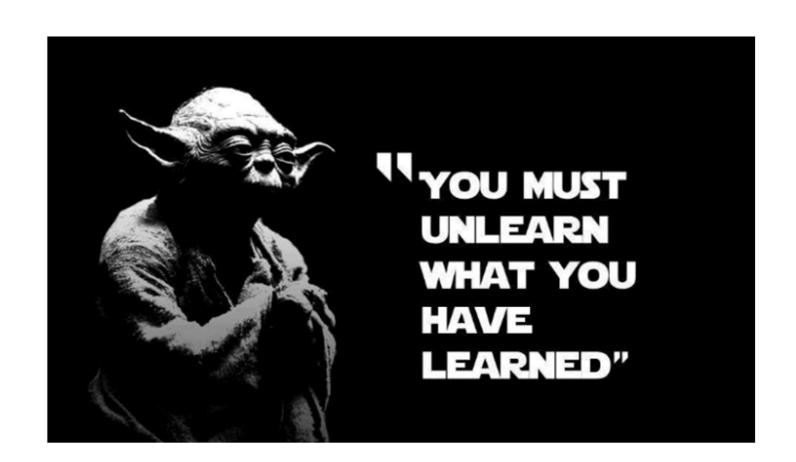
# **Estimating & Cost Forecasting**

- Designing to an estimate and set of assumptions.
- Utilizing model data to support estimate trending.



### **Behavior Modification**

- Transitioning from the 'traditional project delivery' to the IPD contract.
- Understanding "The Deal" Two jobsites, One Budget.
- Contract was a guidebook and not used as a playbook.
- Risk sharing, not risk shifting.





### What's the Deal.?



### **Behavior Modification**

- Speed of delivery, reduction in schedule, trust enabling faster execution
- Create an environment where we care less about the conventional issues and more about delivering the project successfully together.
- Team took on huge challenge of project close-out in record time.
- Partners teaching partners and helping them improve.
- Onboarding of new team members is critical to success and must continue throughout the execution phase.

### Wrap-Up

- Focus on the behaviors and drive collaboration.
- Invest in the right resources early, you will save time and effort later.
- Owner engagement is necessary to success, bring them in, don't shut them out.
- Team health is critical to success, we managed over 95% rating on our team's willingness to do it all over and work together again!

### Contact Us

Craig Russell Executive Director

Walt Disney Imagineering
Owner



John Clappison
Corporate Counsel

CCK Construction Services
Concrete Trade Partner



jclappison@colasantigroup.com

craig.s.russell@disney.com

Ryan Seckinger Principal

Walter P. Moore Structural Engineer



rseckinger@walterpmoore.com

Matt Bleakley Vice President

Whiting-Turner Contracting Co. cm/gc



matt.bleakley@whiting-turner.com





In the spirit of continuous improvement, we would like to remind you to complete this session's survey in the Congress app! We look forward to receiving your feedback. Highest rated presenters will be recognized.

BELLELLELLE



Thank you for attending this presentation. Enjoy the rest of the 22<sup>nd</sup> Annual LCI Congress!



### Presentation Style Guide

- Make sure guides are turned on. Click "View" on top ribbon then select guides
- Use the Provided Template Layouts and Arial font
- The Font color for text is Grey. Minimum font size = 28.
- Plan to spell out acronyms the first time they are used in your presentation
- Insert an image to each slide
- Keep each bullet at no more than 15 words
- Provide a glossary of acronyms from your presentation in the back
- Make sure to delete any unused slide layouts

### **Icon Library**

These icons can be used throughout your presentation

